

## WE CLAIM:

- 1. A downhole pipe repair apparatus, comprising:
- a surface treatment apparatus adapted for cleaning an interior surface of said pipe; and a plating apparatus adapted for plating a new surface on the interior surface of said pipe after said surface treatment apparatus cleans said interior surface of said pipe.
- 10 2. The downhole pipe repair apparatus of claim 1, further comprising:

a corrosion monitoring tool adapted for examining said interior surface of said pipe after said plating apparatus plates said new surface on said interior surface of said pipe.

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- 3. The downhole pipe repair apparatus of claim 2, further comprising:
  - a sealing apparatus disposed between the corrosion monitoring tool and said surface treatment apparatus adapted for sealing off said surface treatment apparatus from said corrosion monitoring tool inside said pipe.
- 4. The downhole pipe repair apparatus of claim 3, further comprising:
- A sealing apparatus disposed between the surface treatment apparatus and the plating apparatus adapted for sealing off said plating apparatus from said surface treatment apparatus inside said pipe.

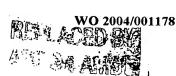


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- 5. A method for downhole pipe repair, said method comprising:
- cleaning an interior of said pipe; and
  plating a new surface on the interior of said pipe after the cleaning step.
  - 6. The method of claim 5, wherein the cleaning step further comprises:
- examining said interior of said pipe; and

  cleaning said interior of said pipe after the examining step.
  - 7. The method of claim 6, wherein the plating step comprises an electrolytic plating step.
- 8. The method of claim 6, wherein the plating step comprises a chemical plating step.
  - 9. The method of claim 6, wherein the cleaning step comprises blasting a material against said interior of said pipe thereby generating removed corroded areas, and collecting removed corroded areas in a container.
    - 10. The method of claim 6, said method further comprising re-examining said interior of said pipe after the plating step.
- 25 11. The method of claim 10, wherein the examining and the re-examining step each further comprise:



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pressing one or more fingers against said interior of said pipe, passing said fingers over said interior of said pipe, and flexing said fingers when a corroded area is encountered on said interior; and

generating an electrical signal in response to the flexing step representative of said corroded area..

12. The method of claim 10, wherein the examining and the re-examining step each further comprise:

propagating a compressional or shear wave through one or more corroded areas on said interior of said pipe, receiving the compressional or shear waves from the interior of said pipe, and generating a record of the received compressional or shear waves representative of said corroded areas.